

2123 #2

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))**

Docket No.
PM 98.086

In Re Application Of: Kenneth E. Dahlberg

Serial No.	Filing Date	Examiner	Group Art Unit
10/042,475	January 9, 2002	Unknown	2123

Title:

VOLUMETRIC LAMINATED SAND ANALYSIS

Address to:
Assistant Commissioner for Patents
Washington, D.C. 20231

37 CFR 1.97(b)

1. The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

2. The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

the statement specified in 37 CFR 1.97(e);

OR

the fee set forth in 37 CFR 1.17(p).

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(c))

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JUN 11 2002

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Examiner
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VOLUMETRIC LAMINATED SAND ANALYSIS

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Docket Number (Optional) PM 98.086	Application Number 10/042,475
Applicants Kenneth E. Dahlberg	
Filing Date Jan 09, 2002	Group Art Unit 2123

PATENT
DISCLOSURE
CITATION
JUN 11 2002

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1	Allen, D. F., Barber, T., Flaum, C., Hemingway, J., Anderson, B., des Ligneris, S., Everett, R., and Morriss, C., 1988, "Advances in High-Resolution Logging", The Technical Review, Schlumberger, v. 36, no. 2, pp. 4-14.
2	American Geological Institute, 1984, Dictionary of Geological Terms, 3rd Edition, R. L. Bates and J. A. Jackson, eds., Anchor Books, Doubleday, New York, p. 571.
3	Anderson, B., Safinya, K. A., and Habashay, T., 1988, "Effect of Dipping Beds on the Response of Induction Tools", SPE Formation Evaluation, March 1988, pp. 29-36.
4	Arehart, R. A., and Sullivan, K. B., 1996, "Automated Net-to-Gross Cutoffs from Digital Core Images" Formation Evaluation and Reservoir Quality Newsletter (Winter, 1996) pp. 151-153.
5	Beck, G. F., 1995, "Forward Modeling of Deep Resistivity Response in Nonphlet Wells", Proceeding of SPWLA 36th Annual Symposium, Paper HHH, June 26-29, 1995, pp. 1-12.
6	Brackett, R. A., 1996, "Direct Digital Core Imaging: An Evaluation of Available Products", Formation Evaluation and Reservoir Quality Newsletter (Summer, 1996) vol. 27, pp. 3-4.
7	Brackett, R. A., 1996, "Flip/Frac View: Error in Dip Determination from Borehole Images", Formation Evaluation and Reservoir Quality Newsletter (Summer, 1996) vol. 27, pp. 15-17.
8	Brackett, R. A., 1997, "ImageLog for Sand Volume Determination: An Evaluation", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1997), vol. 28, pp. 31-34.
9	Brackett, R. A., 1997, "A Checklist for Obtaining Useful Digital Core Images on Photo CDs", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1997), vol. 28, pp. 35-36.
10	Brackett, R. A., Friedmann, S. J., and Haro, J. E., 1996, "Comparison of Core Images from Kodak DCS 460C Digital Camera and Traditional Photography", Formation Evaluation and Reservoir Quality Newsletter (Summer, 1996), vol. 27, pp. 7-14.
11	Brackett, R. A., Lukas, T. C., and Arehart, R. A., 1997, "Automated Texture-Based Classification of Image Data Using QBIC (Query by Image Content)", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1997), vol. 28, pp. 37-45.
12	Brackett, R. A., and Sullivan, K. B., 1996, "Digital Core Data Quality and Calibration: Implications in Thinly Bedded Reservoirs", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1996) pp. 129-136.
13	Campbell, C. V., 1967, "Lamina, Laminaset, Bed and Bedset", Sedimentology, v. 8, pp. 7-26.
14	Chemali, R., Gianzero, S., and Su, S. M., 1987, "The Effect of Shale Anisotropy on Focused Resistivity Devices", SWLA 28th Annual Logging Symposium, London, Paper H, pp. 1-23.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		RECEIVED JUN 14 2002 Technology Center 2100	Docket Number (Optional) PM 98.086	Application Number 10/042,475
		Applicants Kenneth E. Dahlberg		
		Filing Date Jan 09, 2002	Group Art Unit 2123	

JUN 11 2002 U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	REF	DOCUMENT NUMBER <i>PATENT</i>	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

15	Cheow, W., Barone, S., Anderson, B., and Hennessy, C., 1984, "Diffraction of Axisymmetric Waves in a Borehole by Bed Boundary Discontinuities", Geophysics, v. 9, no.10, pp.1586-1595.
16	Hornby, B. E., Schwartz, L. M. and Hudson, J. A., 1993, "Effective Medium Modeling of the Electrical and Elastic Properties of Anisotropic Porous Media", SEG 63 rd Annual Meeting, Washington, D.C., Sept. 26-30, 1993, pp. 786-791.
17	Dunsmuir, J., Shafer, J., and Thomman, H., 1997, "3-D Imaging of Pore Fluids Distributions in Chad Rock Using High Resolution X-Ray CT", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1997), vol. 28, pp. 111-115.
18	Eubanks, D. L., and Moustafa, O., 1997, "Characterization of Low-Contrast/Low-Resistivity Reservoirs with Modern Imaging Tools: Example from the Gulf of Mexico", AAPG Annual Convention, April 6-9, 1997, Dallas, TX, vol. 81, p. 1.
19	Frodensen, E. W., and Lawrence, T., 1997, "Low-Resistivity, Low-Contrast Pay: Some Examples from Offshore North West Java", Ardjuna Basin, Indonesia, AAPG Annual Convention, April 6-9, 1997, Dallas, TX, vol. 81, p. 1.
20	Galford, J. E., Flaum, C., Gilchrist, W. A., and Duckett, S. W., 1986, "Enhanced Resolution Processing of Compensated Neutron Logs", 61 st Ann. Tech. Conference of SPE, paper 15541.
21	Galway, R., 1997, "Netting and the Integration of Log, Core, and Test Data", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1997), vol. 28, pp. 47-49.
22	Herrick, D. C., and Kennedy, W. D., 1996, "Electrical Properties of Rocks: Effects of Secondary Porosity, Laminations, and Thin Beds", SPWLA 37 th Annual Symposium, Paper C, pp. 1-11.
23	Katahara, K. W., 1995, "Gamma Ray Log Response in Shaly Sands", The Log Analyst, v. 36, no. 4, pp. 50-55.
24	Looyestijn, W. J., 1982, "Deconvolution of Petrophysical Logs: Applications and Limitations", SPWLA, 23 rd Annual Logging Symposium, July 6-9, 1982, Paper W, pp. 1-20.
25	Lukas, T. C., 1997, SPE Forum "Applications of Borehole Imaging Technologies", July 7-12, 1996, Formation Evaluation and Reservoir Quality Newsletter, vol. 28, pp.147-152.
26	Mavco, G., Mukerji, T., and Dvorkin, J., 1998, "The Rock Physics Handbook, Tools for Seismic Analysis in Porous Media", Cambridge University Press.
27	McCoy, D. D. and Grieves, W. A., 1997, "Use of Resistivity Logs To Calculate Water Saturation at Prudhoe Bay", SPE Reservoir Engineering, February, pp. 45-51.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Applicants

Kenneth E. Dahlberg

Filing Date

Jan 09, 2002

Group Art Unit

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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	39	5,461,562	10/24/95	Tabanou et al.	364	422	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	28	Moran, J. H., and Gianzero, S., 1979, "Effects of Formation Anisotropy of Resistivity Logging Measurements", Geophysics, v. 44, no. 7, pp. 1266-1286.
	29	Mullarkey, J. C., and Dolly, E. D., 1997, "Causes of Low Contrast, Low Resistivity in Hydrocarbon Productive Reservoirs of the Rocky Mountain and Mid-Continent Regions", AAPG Annual Convention, April 6-9, 1997 Dallas, TX, 1 p.
	30	Murtha, J. A., 1997, "Monte Carlo Simulation: Its Status and Future", Journal of Petroleum Technology, April, pp. 361-373.
	31	Pepper, C. F., and Reedy, G. K., 1996, "Analysis of Laminated Turbidites Using the Bimodal Sand Quality Model (Model Application)", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1996) pp. 87-91.
	32	Poupon, A., Loy, M. E., and Tixier, M. P., 1954, "A Contribution to Electrical Log Interpretation in Shaly Sands", Journal of Petroleum Technology, June 1954, v. 6, no. 6, pp. 27-34.
	33	Reedy, G. K., and Pepper, C. F., 1996, "Analysis of Laminated Turbidites Using the Bimodal Sand Quality Model (Model Development)", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1996) pp. 79-85.
■	34	Serra, O., and Andreani, M., 1991, "Thin Beds- A Guide to Interpretation of Thinly Layered Reservoirs", Schlumberger, 82 p.
	35	Sneider, R. M., and Kulha, J. T., 1997, "Low Resistivity, Low Contrast Pays", 1997 AAPG Annual Convention, vol. 81, April 6-9, 1997, Dallas, TX, 1 p.
	36	Sullivan, K. B., and Brackett, R. A., 1996, "Repeatability in Net-to-Gross from Core Images: The Human Factor", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1996) pp. 137-149.
	37	Sullivan, K. B., Brackett, R. A., and Albertin, S. J., 1996, "Net-to-Gross from FMI: A High-Resolution Comparison to Core", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1996) pp. 155-169.
	38	Sullivan, K. B., and Yin, H., 1997, "SHARP™ and "Not-So-SHARP": Two Examples of 1D Resistivity Models", Formation Evaluation and Reservoir Quality Newsletter (Winter, 1997) vol. 28, pp. 99-103.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Technology Center 2000 JUN 11 2002

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Filing Date

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Group Art Unit

2123

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	48	4,739,255	4/19/88	Hagiwara, T.	324	152	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

40	Tsang, L., Chan, A. K., and Gianzero, S., 1984, "Solution of the Fundamental Problem in Resistivity Logging With a Hybrid Method" Geophysics, v. 49, no. 10, pp. 1596-1604.
41	Van Wagoner, J., Mitchum, R., Campion, K., and Rahmian, V., 1990, "Siliciclastic Sequence Stratigraphy in Well Logs, Cores, and Outcrops: Concepts for High-Resolution Correlation of Time and Facies", AAPG Methods in Exploration Series, No. 7., 55 pgs.
42	Wahl, J. S., 1983, "Gamma-Ray Logging", Geophysics, v. 48, no. 11, pp. 1536-1550.
44	Yin, H., 1996, "The Use of Resistivity Micro-Probe and its High-Resolution Profile for Forward Modeling", Formation Evaluation and Reservoir Quality Newsletter (Winter 1996) pp. 103-109.
45	Yin, H., 1996, "In-House" Resistivity Modeling—Where Are We Now?", Formation Evaluation and Reservoir Quality Newsletter (Winter 1996) pp. 111-121.
46	Yin, H., 1997, "Resolving Differences Between LWD and Wireline Resistivity Data by DLL 2-D Modeling", Formation Evaluation and Reservoir Quality Newsletter (Winter 1997) vol. 28, pp. 87-91.
47	Yin, H., and Sullivan, K. B., 1997, "Dual Laterolog (DLL) 2-D Modeling", Formation Evaluation and Reservoir Quality Newsletter (Winter 1997) vol. 28, pp. 93-97
49	Van den Berg, F. et al, "Sandwich: Log Evaluation in Laminated Shaly Sands", SPWLA 37 th Annual Logging Symposium, June 16-19, 1996, Paper BB, 12 pgs.
50	Tarantola, A., 1987, "Inverse Problem Theory: Methods for Data Fitting & Model Parameter Estimation", pp. 167-185.
51	Mendelson, K. S. and Cohen, M. H., 1982, "The Effect of Grain Anisotropy on the Electrical Properties of Sedimentary Rocks", Geophysics, vol. 47, no. 2, Feb. 1982, pp. 257-263.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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